

What is claimed is:

1. A composite comprising a foamed polyester core material bonded to one or more structural skins, wherein the core material comprises a plurality of foamed strands, wherein there are substantially no inter-strand voids.
2. The composite of claim 1, wherein the core material is bonded between two structural skins.
3. The composite of claim 1, wherein the one or more structural skins comprise a structural sandwich composite.
4. The composite of claim 1, further comprising a resin bonding at least one of the skins to the core material.
5. The composite of claim 1, wherein the one or more structural skins comprises a thermoplastic polymer, a thermosetting polymer, wood, an inorganic material, or a metallic material.
6. The composite of claim 5, wherein the thermoplastic or thermosetting polymer comprises glass fibers, metallic fibers, inorganic fibers, or carbon fibers.
7. The composite of claim 1, wherein the foamed polyester core material comprises foamable polyethylene terephthalate.
8. The composite of claim 1, wherein the core material comprises a nucleating agent, a fire retardant, or a reinforcing agent.